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Sarah E. Evans

*University of Nebraska-Lincoln, SAEvans6@gmail.com*

Anne L. Steel

*University of Nebraska-Lincoln*

Laura E. Watkins

*University of Nebraska-Lincoln*

David DiLillo

*University of Nebraska-Lincoln, ddilillo@unl.edu*

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# Childhood Exposure to Family Violence and Adult Trauma Symptoms: The Importance of Social Support from a Spouse

Sarah E. Evans, Anne L. Steel, Laura E. Watkins, and David DiLillo

Department of Psychology, University of Nebraska–Lincoln

*Corresponding author* – Sarah E. Evans, Children’s Mercy Hospitals & Clinics, 2401 Gillham Road, Kansas City, MO 64108, email [sevens1@cmh.edu](mailto:sevens1@cmh.edu)

## Abstract

This study examines the roles of positive and negative social support from a spouse as potential moderators of associations between experiences of physical abuse and exposure to intimate partner violence (IPV) as a child and adult trauma symptoms. We hypothesized that positive social support received from a spouse would have a buffering effect on trauma symptoms whereas negative social support from a spouse would have a potentiating effect. Participants were 193 newlywed couples (total  $N = 386$ ) randomly recruited from a marriage license database. Participants completed self-report questionnaires measuring the nature and severity of child maltreatment and trauma symptoms, and they engaged in a brief videotaped task in which they discussed a personal problem with their partner. Positive and negative support behaviors exhibited during the recorded task were then coded. Results of dyadic data analysis (actor partner interdependence model) indicated that positive social support from a spouse buffered against trauma symptoms among men who were exposed to IPV during childhood whereas negative social support from a spouse potentiated trauma symptoms among men who were exposed either to IPV or child physical abuse (CPA). The buffering and potentiating effects of spousal support were reduced among men who were exposed to increasingly severe levels of IPV and CPA. By contrast, women’s trauma symptoms were unrelated to positive or negative support from a spouse. These findings extend prior research by suggesting that, for men, day-to-day provisions of support from a spouse may play a key role in posttraumatic recovery.

**Keywords:** child physical abuse, intimate partner violence, social support, posttraumatic stress symptoms

Children too often experience violence in the home, either directly in the form of child physical abuse (CPA) or indirectly through exposure to intimate partner violence (IPV). Recent estimates suggest that 16% of children in the United States are victims of CPA (U.S. Department of Health & Human Services, Administration on Children, Youth and Families, 2008) and that 29% of minors are exposed to IPV (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). CPA and exposure to IPV may share common etiological risk factors, including perpetrator characteristics (e.g., physiological reactivity, parental history of abuse) and environmental factors (e.g., financial or work-related stress). Alternatively, one form of violence may “spill over” to other familial relationships (Knickerbocker, Heyman, Slep, Jouriles, & McDonald, 2007). In either case, these processes contribute to the high co-occurrence documented between CPA and exposure to IPV. In a recent national survey of youth, almost one third reported that they had been physically abused and exposed to IPV during their lifetime (Hamby, Finkelhor, Turner, & Ormrod, 2010).

CPA and IPV exposure have each been linked to a range of psychological difficulties in adulthood (e.g., Andover, Zlotnick, & Miller, 2007; Herrenkohl, Hong, Klika, Herrenkohl, & Russo, 2013). However, posttraumatic stress symptomatology stands out as among the most pervasive (Lang, Stein, Kennedy, & Foy, 2004). In fact, after controlling for relevant familial, individual, and socioeconomic risk factors, approximately one third of adult CPA survivors report trauma symptoms (Widom, 1999). Furthermore, research accounting for similar covariates finds that, compared with other common psychological outcomes, trauma symptoms are the strongest mental health correlate of IPV exposure (Davies, DiLillo, & Martinez, 2004).

Despite linkages between these types of maltreatment and adult trauma symptoms, not all victims experience long-term difficulties. In fact, approximately two thirds of adult CPA victims do not exhibit trauma symptoms (Widom, 1999). Furthermore, some studies have failed to find a significant effect of childhood IPV exposure on adult trauma symptoms beyond that attributable to other traumatic experiences (Kulkarni, Graham-Bermann, Rauch, & Seng, 2011; Silvern et al., 1995). This variability in long-term functioning among victims suggests that other factors likely intervene to promote resilience or potentiate risk after early violence exposure.

### **Abuse Severity**

Although most research on CPA and IPV exposure has simply labeled participants as “victims” or “nonvictims,” the severity of these experiences may play a role in understanding long-term trauma symptoms. For example, a child who is beaten for minor transgressions or who witnesses a parent assaulted with a lethal weapon would likely experience greater long-term traumatization than a child who was slapped on one occasion or witnessed a parent being shoved during an argument. Indeed, various aspects of abuse severity (e.g., greater frequency and duration of abusive acts experienced or witnessed, younger age of the child, and the presence of injuries) have been linked to greater psychological maladjustment, including trauma symptoms (Banyard, Williams, & Siegel, 2004; Trickett, Noll, & Putnam, 2011). This highlights the need to consider the contribution of severity as a predictor of adult trauma symptoms.

## Social Support

The quality of social support received from others is a second factor that may alter the effect of early CPA and IPV exposure on long-term functioning. Positive social support, defined as cognitive and emotional assistance provided to someone coping with a problem (Thoits, 1986), is characterized by behaviors such as active listening, expressing concern, or aiding in problem-solving (Cutrona, 1986). According to the social-cognitive processing (SCP) model of adjustment to trauma (Lepore, 2001), positive social support received from others in response to trauma disclosure buffers against distress by enhancing cognitive processing. Supportive behaviors facilitate trauma-related discussions, which allow victims to construct a more adaptive narrative of the trauma and habituate to the memories of the event (Lepore, Ragan, & Jones, 2000). On the other hand, others may respond to emotional disclosure, with statements or acts that are overtly (e.g., criticizing or blaming a spouse for the problem) or covertly invalidating (e.g., appearing bored or disinterested, redirecting the conversation to discuss oneself). Such behaviors, termed “negative social support” (Pasch & Bradbury, 1997, 1998), may exacerbate trauma symptoms by prompting avoidance of overt discussion and internal processing of the trauma or by strengthening maladaptive cognitive distortions about the trauma (e.g., validating one’s self blame for the trauma).

Evidence supporting the SCP model comes from studies examining social support within the context of trauma-related discussions. For example, in a laboratory study with college students who viewed a stressful video (Lepore et al., 2000), those who talked to a validating confederate about their experience exhibited lower distress upon reexposure to the video than did those who did not discuss their experience. Results indicated that this distress reduction was mediated by fewer intrusive thoughts after the initial exposure, suggesting that talking with a supportive other aided students in cognitively processing the experience. Likewise, in a recent study of victims exposed to various types of trauma (Belsher, Ruzek, Bongar, & Cordova, 2012), those who reported that their attempts to discuss trauma-related thoughts and feelings were frequently met with social constraints (i.e., invalidating behaviors) were more likely to report trauma symptoms.

In addition to the role of social support offered in direct response to a trauma-related disclosure, routine positive social support may be important for adult survivors’ adjustment. Findings show that positive support exhibited during couples’ discussions of day-to-day problems may have a cumulative effect on the overall quality of the relationship by promoting mutual trust and security (Sullivan, Pasch, Eldridge, & Bradbury, 1998). In addition, a globally supportive relationship can safeguard partners from distress by boosting self-esteem while enabling them to cognitively reappraise stressors as less threatening (Cohen & McKay, 1984). Exposure to violence as a child may negatively shape views of the self as well as relationship expectations such that adult victims initially perceive threat to personal safety within their own marriage. However, consistently supportive interactions with a spouse in response to day-to-day stressors may facilitate coping with trauma-related distress by conveying a global sense of competence to the adult survivor (Cohen & McKay, 1984). Positive support may also provide a corrective experience that challenges safety concerns, thus diminishing perceived threat and related distress. On the other hand, consistently invalidating interactions with a spouse may further contribute to negative self-views and compound heightened threat perception.

Despite evidence suggesting that spousal support moderates associations between early violence exposure and long-term functioning, recent studies indicate that the buffering effects of positive support may be limited to cases in which individuals are exposed to less severe, less frequent, or fewer types of violence (Evans, Steel, & DiLillo, 2013; Folger & Wright, 2013). For example, Salazar, Keller, and Courtney (2011) found that self-reported positive social support buffered against depressive symptoms only among individuals reporting fewer types of child maltreatment. However, this protective effect diminished with increasing types of maltreatment. Given these findings, experiencing high levels of CPA and IPV exposure may result in trauma symptoms that go beyond that which can be buffered by spousal support. Conversely, experiencing CPA and IPV exposure may increase vulnerability to the potentiating effects of negative spousal support. That is, negative support interactions with a spouse may exacerbate trauma symptoms by adversely affecting self-esteem and threat perception, both of which may be particularly problematic among those exposed to multiple types of violence during childhood.

### **The Current Study**

The goal of this study was to examine associations among CPA severity, the severity of childhood IPV exposure, and the interaction of these experiences in predicting adult trauma symptoms. On the basis of the research reviewed above, we hypothesized that (a) greater severity of physical abuse and IPV exposure in childhood would each be associated with increased adult trauma symptom severity; (b) positive social support received from a spouse would have a buffering effect in which the effects of CPA and IPV exposure in predicting trauma symptoms would each be reduced in individuals receiving more positive social support from spouses; (c) negative social support received from a spouse would have a potentiating effect in which the effects of CPA and IPV exposure in predicting trauma symptoms would each be increased among those reporting greater levels of negative social support from spouses; (d) a positive three-way interaction would emerge among CPA, IPV exposure, and positive spousal support such that the buffering effects of positive spousal support on the violence exposure-trauma symptom relationship would be reduced as the severity of one type of violence exposure increased (e.g., as the severity of CPA increased, the buffering effect of positive spousal support on IPV exposure would be reduced); and (e) a positive three-way interaction would emerge among CPA, IPV exposure, and negative spousal support such that the potentiating effects of negative spousal support on the violence exposure-trauma symptom relationship would be strengthened as one type of violence exposure increased (e.g., as the severity of IPV exposure increased, the potentiating effect of negative spousal support on CPA would be strengthened).

### **Method**

#### ***Participants***

Participants were 193 newlywed couples ( $N = 386$  participants) randomly recruited from a publicly available marriage license database in Lancaster County, Nebraska, as part of a larger study examining associations between child maltreatment and adult marital functioning. A couple was defined as newlyweds if they had been married 1 year or less at the time they were recruited. In addition, both spouses were required to be at least 19 years of age, the legal age of majority in

Nebraska. Recruitment efforts from the larger study resulted in a sample of couples that had been married an average of 11.06 months ( $SD = 2.46$ , range = 11–15 months). Participants' ages ranged from 19 to 50 ( $M = 26.59$ ,  $SD = 4.13$ ). Regarding ethnicity, 94.1% of participants were European American, 0.7% African American, 1.5% Hispanic/Latino, 0.7% Asian American, 0.7% Native American, and 2.2% unknown. The average reported annual family income was as follows: 39.5% of participants reported an income of under \$40,000, 43% reported an income of \$40,001 to \$80,000, and 17.5% reported an income of above \$80,001.

## *Measures*

### *Computer Assisted Maltreatment Inventory*

The Computer Assisted Maltreatment Inventory (CAMI; DiLillo et al., 2010) is a computer administered self-report measure that retrospectively assesses child maltreatment experiences. The CAMI yields binary classifications (victim and nonvictim) and continuous scores reflecting the severity of each abuse type. In this study, the continuous scores were used to derive severity scores for CPA and IPV exposure for each participant. Initially, participants respond to behaviorally specific screener questions that reveal whether they experienced or were exposed to various abusive acts before age 18. Subsequent questions inquire about the details of such events. The presence of certain features of the events, empirically determined to be indicative of greater severity of CPA or exposure to IPV (i.e., frequency of the acts, nature of the acts, duration of the acts, whether injury resulted from the acts, whether medical attention was sought, the number of and relationship to the perpetrator[s] who committed the acts, the location of the participant during the acts), are assigned a weighted score reflecting abuse severity. The CAMI has strong internal consistency and test-retest reliability (DiLillo et al., 2010). The developers also report good criterion-related validity when compared with the Childhood Trauma Questionnaire (Bernstein & Fink, 1998), another widely used measure of child maltreatment (DiLillo et al., 2010).

### *Social support discussion task*

Using procedures described by Pasch and Bradbury (1997), spouses were each asked to choose a personal problem to discuss with their partner (e.g., exercising more, being more assertive). The couple was instructed to avoid topics that were a source of conflict within their marriage. Couples then engaged in two 8-min discussions, one about each spouse's topic. Thus, during one discussion, one spouse was instructed to be the "helper," or the person providing social support, whereas the other spouse, who was receiving social support, was the "helpee." The helper spouse was given instructions to "participate however you see fit" rather than being told to provide support during the discussion. All discussions were videotaped to allow for later analysis.

Although the purpose of the discussion is for the helper to aid the helpee in solving a personal problem, the helper's behavior during this discussion has the potential to help or hinder their partner's ability to cope with a problem, which is thought to generalize to situations outside of the task. For example, a spouse who receives positive support from a partner about a less intimate issue (e.g., losing weight) is also likely to receive positive support from a partner concerning struggles with more intimate issues such as coping with childhood trauma or job loss. In contrast, spouses who are unable to provide positive support to their partners, or worse, who engage in

unsupportive or invalidating behaviors (i.e., blaming, criticizing) about a mundane issue, are likely to respond in a similar fashion when being solicited to help with larger issues.

#### *Social Support Interactive Coding System*

The Social Support Interactive Coding System (SSICS; Pasch & Bradbury, 1997) was used to measure social support provided and received during each discussion task. The SSICS generates four types of social support codes: (a) positive social support, including behaviors that convey instrumental (e.g., suggesting a specific plan of action) or emotional support (e.g., bolstering spouse's self-esteem); (b) negative social support, including overt (e.g., criticizing spouse's behavior or character; blaming the spouse for the problem) and covert invalidation (e.g., withdrawing from the conversation); (c) neutral social support, including comments that are ambiguous, solely descriptive, or too brief to be coded (e.g., "yeah"); and (d) off-task speech, including content that is not relevant to the problem at hand. Here, only the positive and negative social support codes provided by the helper were used. Consistent with procedures used by Pasch and Bradbury (1998), a team of advanced undergraduates was trained over a period of 6 months on the underlying theory and procedures involved in reliable use of the SSICS. Interrater reliability checks were conducted weekly until all coders reached initial agreement levels of  $\kappa > .80$ . Coders were subject to random biweekly reliability checks throughout the coding of all data. Finally, subsequent to the completion of data coding, 24% of the data were randomly selected and double-coded to ensure overall interrater reliability. Intraclass correlations revealed high levels of interrater reliability (positive support received = .91, negative support received = .86).

Upon the reliable completion of all data coding, the number of speaking turns classified in each category (i.e., positive support, negative support) was summed. The number derived was then divided by the helper spouses' total number of speaking turns in each discussion. This process yielded a proportion of positive speaking turns and negative speaking turns provided by a spouse during a discussion for each participant's problem. This proportional score then represents the positive and negative social support received by the participant.

#### *Trauma Symptom Inventory*

The Trauma Symptom Inventory (TSI; Briere, 1995) is a 100-item self-report measure developed to assess various trauma-related symptoms. Respondents are asked to utilize a four-point Likert scale, anchored from 0 (*it has never happened*) to 3 (*it has happened frequently*), to indicate the frequency of symptoms within the past 6 months. The TSI contains 10 clinical scales, although only the total score was used in the current study. The first five scales were developed to correspond with posttraumatic stress disorder (PTSD) symptoms outlined in the *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, text revision; American Psychiatric Association, 2000) whereas the remaining clinical scales assess symptoms that are frequently observed in persons who have experienced childhood trauma (Briere, 1995). The internal consistency for the TSI total score in the current sample was .96.

#### *Procedures*

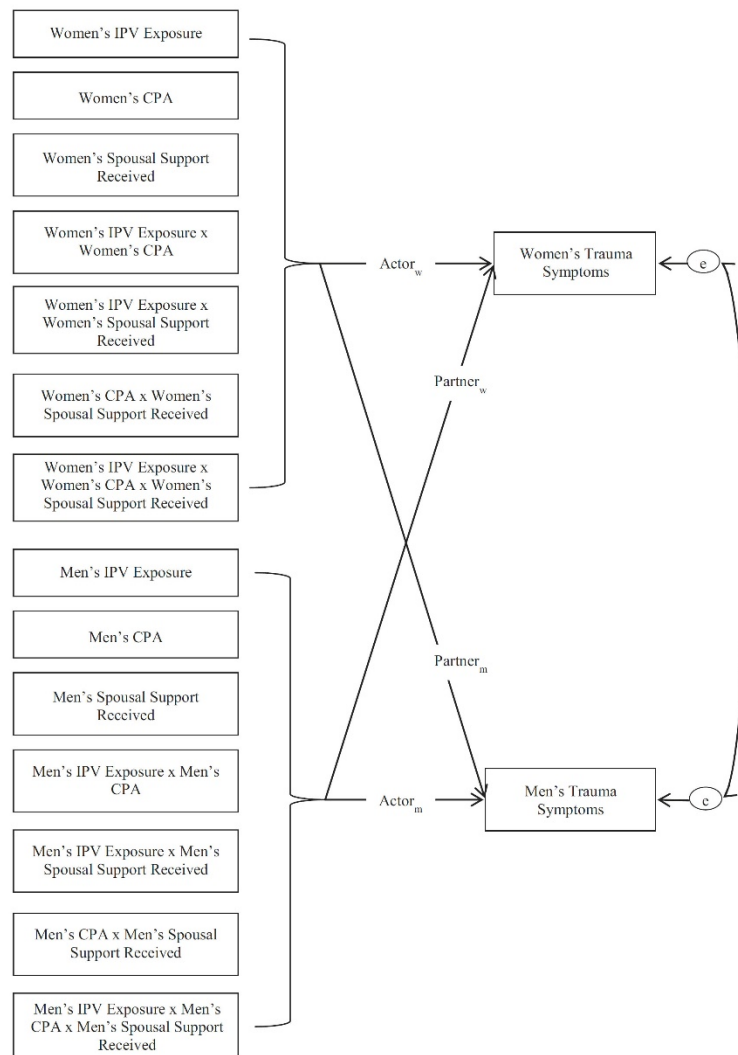
Participants were recruited randomly via mail. Of the 1,465 married couples who were contacted, 202 (14.5%) contacted researchers, were found to be eligible, and subsequently enrolled in the

study, a rate that is comparable to studies using similar recruitment techniques (Davila, Bradbury, Cohan, & Tochluk, 1997). Participants visited the laboratory on three occasions, although only data from the first visit are here. After obtaining informed consent, a battery of self-report questionnaires was administered in random order. Participants were then videotaped engaging in discussion tasks. Participants were debriefed and provided monetary compensation. This study was approved by the home institution's institutional review board.

### *Analytic Approach*

To account for the interdependent nature of the dyadic data, we used the actor-partner interdependence model (APIM; Kashy & Kenny, 1999; Kenny, 1996). This model allows for the concurrent modeling of actor effects and partner effects (see fig. 1). Our stated hypotheses addressed only actor effects, which include the effects of women's CPA, IPV exposure, and spousal support received on women's trauma symptoms and the effects of men's CPA, IPV exposure, and spousal support received on men's trauma symptoms. APIM analyses also provided results for partner effects, which include the effects of women's CPA, IPV exposure, and spousal support received on men's trauma symptoms and the effects of men's CPA, IPV exposure, and spousal support received on women's trauma symptoms. Although exploratory, we present these partner effects to shed additional light on the dyadic processes underlying adjustment to early violence exposure.





**Figure 1.** APIM for the current study. Although not indicated in the figure, all predictors were allowed to correlate. APIM = actor-partner interdependence model; IPV = intimate partner violence; CPA = child physical abuse. Subscript “w” indicates prediction of women’s outcomes and subscript “m” indicates prediction of men’s outcomes.

In figure 1, actor effects are represented by paths labeled “Actor” and partner effects are represented by paths labeled “Partner.” Each path label also contains a subscript. Subscript “w” indicates the prediction of women’s outcomes and subscript “m” indicates prediction of men’s outcomes. Although not shown in figure 1, in addition to modeling actor and partner effects, APIM allows each predictor to correlate with the other predictors. Finally, APIM includes a correlation between the residuals of the two outcomes that is represented by double-headed arrows connecting the two residuals (each labeled e) in figure 1. This correlation represents the nonindependence of the outcomes not explained by the model. Two separate models predicting men’s and women’s

trauma symptoms were estimated using log-transformed TSI scores to reduce kurtosis and skewness. The first model examined the effect of positive support received whereas the second examined the effect of negative support received. Analyses were conducted under maximum likelihood estimation with robust standard errors using Mplus v. 6.11 software (Muthén & Muthén, 1998–2010). The estimated models were saturated; therefore, there are no model fit statistics that are relevant to report.

For the current analyses, variables were centered at their lowest possible value. Therefore, 0 indicated no CPA, no IPV exposure, and no positive or negative spousal support. Interaction effects were constructed by multiplying each person's predictor variables. Three-way interactions among CPA, IPV exposure, and each type of spousal support were included, plus all lower order two-way interactions were included in each model.

## Results

### Data Description

Descriptive data and bivariate correlations are presented in table 1. As indicated by a paired sample *t* test, men experienced significantly more severe CPA than women,  $t(196) = 2.62, p = .01$ . No other mean differences were found between men and women on study variables.

**Table 1.** Descriptive Statistics and Correlations among Study Variables

Variables	Mean	SD	Range	1	2	3	4	5	6	7	8	9
<b>Men</b>												
1. IPV exposure	3.72	5.96	0–18	—								
2. CPA	8.30	5.62	0–17	.39**	—							
3. Negative support received	0.04	0.10	0–0.57	.07	.09	—						
4. Positive support received	0.43	0.17	0–0.72	.02	.10	-.47**	—					
5. Trauma symptoms <sup>a</sup>	3.72	0.61	1.95–5.20	.32**	.22**	.004	.09	—				
<b>Women</b>												
6. IPV exposure	3.37	5.90	0–18	.05	.06	.03	-.03	.20**	—			
7. CPA	6.84	5.55	0–16	-.02	.02	.01	.00	.12	.20**	—		
8. Negative support received	0.04	0.06	0–0.85	.05	.18**	.36**	-.13	.14	.12	.05	—	
9. Positive support received	0.65	0.19	0–0.96	.06	.02	-.47**	.40**	.03	.03	.05	-.52**	—
10. Trauma symptoms <sup>a</sup>	3.72	0.61	1.61–5.17	.11	.10	.12	-.06	.35**	.20**	.31**	.14	.09

**Note:** IPV = intimate partner violence; CPA = child physical abuse

a. This variable was log-transformed to reduce skewness.

\* $p < .05$ , \*\* $p < .01$

**Positive Support Received**

Results for the APIM model examining the effects of CPA, IPV exposure, and positive spousal support are displayed in table 2. The dependent variables had the following  $R^2$  values for explained variance by the model: men's trauma symptoms ( $R^2 = .18$ ,  $SE = .05$ ,  $p < .001$ ) and women's trauma symptoms ( $R^2 = .15$ ,  $SE = .05$ ,  $p < .01$ ).

**Table 2.** APIM Results for IPV Exposure, CPA, and Positive Spousal Support Predicting Trauma Symptoms

Variable	M → M (Actor <sub>m</sub> )		W → M (Partner <sub>m</sub> )		W → W (Actor <sub>w</sub> )		M → W (Partner <sub>w</sub> )	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
IPV exposure	0.11**	0.04	0.04	0.03	0.02	0.06	0.05	0.08
CPA	0.03	0.02	0.02	0.03	0.01	0.04	0.04	0.02
Positive spousal support received	0.72	0.48	0.04	0.47	0.19	0.54	0.22	0.44
IPV Exposure × CPA	−0.01*	0.00	0.00	0.00	0.00	0.01	0.00	0.01
IPV Exposure × Positive Spousal Support received	−0.20*	0.09	−0.03	0.05	0.01	0.08	−0.14	0.16
CPA × Positive Spousal Support received	−0.06	0.05	−0.03	0.05	0.03	0.05	−0.08	0.05
IPV Exposure × CPA × Positive Spousal Support received	0.02*	0.01	0.01	0.01	0.00	0.01	0.01	0.01

**Note:** We fit the distinguishable or fully saturated model (i.e.,  $df = 0$ ), which allowed actor and partner effects to vary across men's and women's trauma symptoms. APIM = actor-partner interdependence model; IPV = intimate partner violence; CPA = child physical abuse; M = men's; W = women's.

\* $p < .05$ , \*\* $p < .01$

*Actor effects on men's trauma symptoms*

As expected, when men experienced no CPA, men's positive spousal support received had a buffering effect on the relationship between men's IPV exposure and men's trauma symptoms,  $b = -0.20$ ,  $p < .05$ . However, when men experienced no IPV exposure, the interaction between men's CPA and men's positive spousal support received was nonsignificant. As hypothesized, the three-way interaction effect of men's CPA by men's IPV exposure by men's positive spousal support received was 0.02 and revealed that the interaction of IPV exposure by positive spousal support was significantly less negative as CPA increases. Specifically, as described previously, the interaction of IPV exposure by positive spousal support was significantly negative when experiencing no CPA, and the interaction of IPV exposure by positive spousal support was nonsignificantly positive when experiencing 1 *SD* above the mean of CPA,  $b = 0.03$ ,  $p = .48$ .

Simple effects of IPV exposure were estimated to illustrate the three-way interaction. Among men who received no positive spousal support and experienced no CPA, the effect of IPV exposure was significantly positive,  $b = 0.110$ ,  $p < .01$ . Among men who received no positive support and experienced 1 *SD* above the mean of CPA, the effect of IPV exposure was nonsignificantly positive,  $b = 0.015$ ,  $p = .459$ . Among men who received 1 *SD* above the mean of positive support and experienced no CPA, the effect of IPV exposure was nonsignificant,  $b = -.003$ ,  $p = .893$ . Among men who received 1 *SD* above the mean of positive spousal support and experienced 1 *SD* above the mean of CPA, the effect of IPV exposure was significantly positive,  $b = 0.032$ ,  $p < .01$ . In sum, men's IPV exposure positively predicted men's trauma symptoms when men experienced no

CPA and received no positive support and when men experienced high levels of CPA and high levels of positive support.

*Partner effects on men's trauma symptoms*

No partner effects were significant in predicting men's trauma symptoms.

*Actor and partner effects on women's trauma symptoms*

No actor or partner effects were significant in predicting women's trauma symptoms.

**Negative Social Support Received**

Results for the APIM model examining the effects of CPA, IPV exposure, and negative spousal support are displayed in table 3. The dependent variables had the following  $R^2$  values for explained variance by the model: men's trauma symptoms ( $R^2 = .20$ ,  $SE = .05$ ,  $p < .001$ ) and women's trauma symptoms ( $R^2 = .18$ ,  $SE = .05$ ,  $p < .001$ ).

**Table 3.** APIM Results for IPV Exposure, CPA, and Negative Spousal Support Predicting Trauma Symptoms

Variable	M → M (Actor <sub>m</sub> )		W → M (Partner <sub>m</sub> )		W → W (Actor <sub>w</sub> )		M → W (Partner <sub>w</sub> )	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
IPV exposure	0.04**	−0.01	0.02	0.01	0.01	0.01	0.01	0.02
CPA	0.01	0.01	0.01	0.01	0.03*	0.01	0.00	0.01
Negative spousal support received	−1.84**	0.68	−0.29	0.69	0.87	1.12	−0.65	0.59
IPV Exposure × CPA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IPV Exposure × Negative Spousal Support received	0.31*	0.15	0.05	0.07	0.01	0.10	0.57**	0.15
CPA × Negative Spousal Support received	0.22**	0.08	0.05	0.09	−0.12	0.10	0.14	0.07
IPV Exposure × CPA × Negative Spousal Support received	−0.03*	0.01	0.00	0.01	0.00	0.01	0.04**	0.01

**Note:** We fit the distinguishable or fully saturated model (i.e.,  $df = 0$ ), which allowed  $a$  and  $p$  effect to vary across men's and women's trauma symptoms. APIM = actor-partner interdependence model; IPV = intimate partner violence; CPA = child physical abuse; M = men's; W = women's.

\* $p < .05$ , \*\* $p < .01$

*Actor effects on men's trauma symptoms*

As expected, when men experienced no CPA, men's negative spousal support received had a potentiating effect on the relationship between men's IPV exposure and men's trauma symptoms,  $b = 0.31$ ,  $p < .05$ . In addition, when men experienced no IPV exposure, men's negative spousal support received had a potentiating effect on the relationship between men's CPA and men's trauma symptoms,  $b = 0.22$ ,  $p < .01$ . As hypothesized, the three-way interaction effect of men's CPA by men's IPV exposure by men's negative spousal support received was  $−0.03$  and revealed that the interaction of IPV exposure by negative spousal support was significantly less positive as CPA increases and that the interaction of CPA by negative spousal support was significantly less positive as IPV exposure increases. Specifically, as indicated above, the interaction of IPV

exposure by negative spousal support was significantly positive when men experienced no CPA, and this two-way interaction was nonsignificantly negative when 1 *SD* above the mean of CPA,  $b = -0.08$ ,  $p = .36$ .

Simple effects of IPV exposure were estimated to illustrate the three-way interaction. Among men who received no negative spousal support and experienced no CPA, the effect of IPV exposure was nonsignificant,  $b = 0.024$ ,  $p = .112$ . Among men who received no negative spousal support and experienced 1 *SD* above the mean of CPA, the effect of IPV exposure was significantly positive,  $b = 0.034$ ,  $p < .001$ . Among men who received 1 *SD* above the mean of negative spousal support and experienced no CPA, the effect of IPV exposure was significantly positive,  $b = .069$ ,  $p < .01$ . Among men who received 1 *SD* above the mean of negative spousal support and experienced 1 *SD* above the mean of CPA, the effect of IPV exposure was significantly positive,  $b = 0.023$ ,  $p < .05$ . In sum, these results suggest that IPV exposure was generally related to greater men's trauma symptoms. However, the effect of IPV exposure was qualified by significant interactions, such that when men received no negative spousal support and experienced no CPA, IPV exposure did not predict trauma symptoms.

#### *Partner effects on men's trauma symptoms*

No partner effects were significant in predicting men's trauma symptoms.

#### *Actor effects on women's trauma symptoms*

The three-way interaction of women's CPA by women's IPV exposure by women's negative spousal support received was nonsignificant,  $b = .002$ ,  $p = .865$ . In addition, all two-way interactions of women's predictors were nonsignificant in predicting women's trauma symptoms. Women's IPV exposure and women's negative spousal support received did not predict women's trauma symptoms. Women's CPA positively predicted women's trauma symptoms,  $b = 0.031$ ,  $p < .001$ .

#### *Partner effects on women's trauma symptoms*

When men experienced no CPA, men's negative spousal support received had a potentiating effect on the relationship between men's IPV exposure and women's trauma symptoms,  $b = .57$ ,  $p < .01$ . However, when men experienced no IPV exposure, the interaction between men's CPA and men's negative spousal support received was not significant. The three-way interaction effect of men's CPA by men's IPV exposure by men's negative spousal support received was  $-0.04$ , revealing that the interaction of men's IPV exposure by men's negative spousal support received was significantly less positive as men's CPA increases. More specifically, the interaction of IPV exposure by negative spousal support received was significantly positive when men received no negative spousal support, and the interaction of IPV exposure by negative spousal support was nonsignificantly negative when men experienced 1 *SD* above the mean of CPA,  $b = -0.04$ ,  $p = .52$ .

Simple effects of IPV exposure were estimated to illustrate the three-way interaction. When men received no negative spousal support and experienced no CPA, the effect of IPV exposure was nonsignificant,  $b = -0.017$ ,  $p = .416$ . When men received no negative spousal support and experienced 1 *SD* above the mean of CPA, the effect of men's IPV exposure on women's trauma symptoms was nonsignificant,  $b = 0.013$ ,  $p = .168$ . When men received 1 *SD* above the mean of negative spousal support and experienced no CPA, the effect of men's IPV exposure on women's

trauma symptoms was significantly positive,  $b = .064$ ,  $p < .01$ . Among men who received 1 *SD* above the mean of negative spousal support and experienced 1 *SD* above the mean of CPA, the effect of men's IPV exposure on women's trauma symptoms was nonsignificant,  $b = 0.007$ ,  $p = .462$ . In sum, men's IPV exposure predicted women's trauma symptoms only when men received high levels of negative support.

## Discussion

The study presented here extends prior work on the buffering effect of perceived social support by examining positive and negative support received from one's spouse, measured observationally, in a sample of recently married couples. Results indicated that spousal support plays a substantially different role in the relationship between early experiences of family violence and adult trauma symptoms for men versus women. In brief, positive social support from a spouse buffered against trauma symptoms among men who were only exposed to IPV during childhood. However, as the severity of CPA increased, this buffering effect was reduced. Negative social support from a spouse potentiated trauma symptoms among men who were exposed to IPV or to CPA. This effect was reduced when men were exposed to increasingly severe levels of IPV and CPA. By contrast, women's symptoms were unrelated to positive or negative support from a spouse.

Our finding that IPV exposure was no longer predictive of adult trauma symptoms when men received high levels of positive social support from a spouse (and did not also experience CPA) is consistent with studies indicating that observed positive spousal support protects against the detrimental effect of life stressors (e.g., Gable, Gonzaga, & Strachman, 2006). However, to our knowledge, the study presented here is the first to identify such support as a protective factor specifically against the effect of childhood maltreatment. Further, although studies have identified the role of the positive support provided in response to trauma disclosure (e.g., Lepore, 2001), the findings presented here suggest that day-to-day receipt of positive support, even for issues unrelated to trauma, may buffer against abuse-related trauma symptoms. Thus, positive spousal support may go beyond the alleviation of immediate situational distress to confer "cumulative benefits" (Sullivan et al., 1998) that protect men from ongoing distress. This possibility is consistent with research identifying the role of positive spousal support in promoting healthy psychological and marital functioning (Pasch & Bradbury, 1998; Sullivan, Pasch, Johnson, & Bradbury, 2010). This cumulative benefit provided by a generally supportive spouse may be particularly helpful for men, many of whom may be reluctant to disclose their past victimization, even to spouses.

The buffering effect of positive spousal support was reduced when men experienced higher levels of IPV exposure and CPA during childhood. This suggests a diminishing benefit of spousal support as the number of types of early violence exposure increases. These results extend prior work indicating that the protective effects of perceived positive social support diminish as the severity or number of types and incidents of violence increases (Evans et al., 2013; Folger & Wright, 2013; Salazar et al., 2011). In the study presented here, it may be that cumulative trauma symptoms associated with both forms of violence exposure exceed that which could be buffered by positive spousal support. Should this be the case, men who endured multitype abuse as a child may require additional assistance from mental health professionals with expertise in evidence-

based approaches to treating adult trauma symptoms. On the other hand, it is possible that exposure to early abuse that spans multiple relationships (i.e., parent-child, parent-parent) has a particularly negative effect on individuals' interpersonal schemas. In the absence of disconfirming evidence in the home, abusive modeling at the parent-child and interparental levels may lead a child to view relationships as devoid of trust and safety. Such views may shape individuals' expectations for relationships in adulthood, making them less likely to seek or be receptive to social support from others.

Men's exposure to IPV and CPA was more strongly associated with trauma symptoms when men received higher levels of negative spousal support. These findings extend others that link negative social reactions to trauma disclosure to increased PTSD (e.g., Ullman, 2007). Here, poor support received from a spouse interacted with childhood experiences to predict men's trauma symptoms, even when that support was provided for an issue unrelated to abuse history. Thus, negative support may play an additive, albeit detrimental, role in long-term adjustment. Moreover, if even everyday stressors are met with spousal invalidation, men may be especially reluctant to disclose emotions related to abuse, which are often characterized by shame and vulnerability (Bennett, Sullivan & Lewis, 2005; Stuewig & McCloskey, 2005). This negative support may add to the challenges of psychological recovery by promoting men's avoidance of overt discussion and internal processing of abuse.

Contrary to expectations, negative social support did not exacerbate trauma symptoms as the number of types of early violence exposure increased. Rather, similar to studies of positive social support (e.g., Evans et al., 2013), negative social support showed no effect on trauma symptoms at higher levels of abuse severity. Negative support's lack of effect in the presence of more severe multitype abuse may indicate that once child maltreatment experiences have reached a certain threshold, day-to-day negative support interactions with a spouse do not worsen the survivor's trauma symptoms.

Although our findings highlight the importance of spousal support in men's posttraumatic recovery, they indicate that spousal support may not play a role in women's recovery. One reason may be that women seek and benefit more from support provided by a broader network of family and friends than do men (Verhofstadt, Buysse, & Ickes, 2007; Walen & Lachman, 2000). In fact, a recent study showed that although perceived support from family and friends buffered against adult trauma symptoms among female victims of CPA, support from a significant other did not serve this protective role (Wilson & Scarpa, 2013). This is consistent with analyses of other data from the sample used in the study presented here (Evans et al., 2013), which revealed that perceived social support from family weakened associations between child maltreatment and trauma symptoms among women. Taken as a whole, past and present findings suggest that support from family and friends may be more important to women's well-being than is spousal support.

Our exploratory analysis revealed that partners' childhood experiences were largely unrelated to their spouses' trauma symptoms. One exception was that men's IPV exposure predicted greater women's trauma symptoms under conditions of high negative social support received by men. In this case, factors related to men's early violence exposure may have interacted with women's negative support behaviors to contribute to broader relationship dysfunction. In turn, such relationship stress may adversely affect women's own symptoms.

### ***Limitations and Future Directions***

Limitations of the investigation presented here highlight directions for future research. First, the study utilized a sample of couples who were predominantly of European-American descent. Research suggests that the prevalence of trauma symptoms and the nature of spousal support vary across ethnic groups (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011; Xu & Burleson, 2001). Thus, future studies should examine spousal support among ethnically diverse samples. In addition, although participants discussed a topic unrelated to past abuse, support provided during trauma-specific discussions may also play an important role in posttraumatic recovery (e.g., Belsher et al., 2012). Future work could examine whether the type of spousal support provided in response to trauma-related concerns differs from that provided in response to other concerns—and if so, whether this support is related to psychological adjustment. For example, it is possible that a partner's history of abuse may affect aspects of couple functioning (e.g., trust) and thus have implications for the support provided by a spouse. Lastly, we did not assess traumatic experiences occurring after exposure to IPV or CPA in childhood. Future research in this area should examine the possibility that subsequent trauma exposure could affect adult trauma symptoms and the provision and receipt of spousal support.

### ***Clinical Implications***

The study presented here has several clinical implications, particularly for the treatment of men with a history of exposure to violent childhood experiences. Although the SCP model highlights the benefits of positive social support provided in direct response to trauma disclosure (Lepore et al., 2000), the current findings suggest that even day-to-day provisions of spousal support may play a key role in husbands' posttraumatic recovery. Although it is encouraging that positive support from a spouse may help alleviate abuse-related distress, negative support may exacerbate trauma symptoms experienced by male survivors. Thus, men exposed to physical abuse and IPV as children may benefit from couples-based interventions designed to reduce trauma symptoms and improve spousal social support. These recommendations are consistent with the goals of empirically supported treatments for PTSD, such as cognitive-behavioral conjoint therapy (Monson et al., 2012), which includes psychoeducation about the reciprocal association between trauma symptoms and daily interactions between intimate partners. Couples are encouraged to establish a sense of safety in their relationship by building communication skills that enhance the provision and acceptance of social support between partners. By providing couples with training in skills such as active listening, partners will be better able to validate one another's feelings and experiences while avoiding potentially harmful criticism or blame. As a result, couples may be better able to approach trauma-related emotions in a more collaborative and effective manner.

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